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ANATOMICAL AND PRACTICAL OBSERVATIONS

IN

ST. THOMAS'S HOSPITAL.

1674–1677.

BY

JAMES MOLINS.

EDITED, WITH AN INTRODUCTION AND NOTES FROM THE MS. IN THE BRITISH MUSEUM.

BY

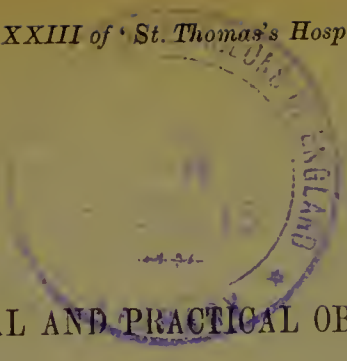
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ST. THOMAS'S HOSPITAL, 1674—1677.

By JAMES MOLINS.

With Introduction and Notes by J. F. Payne, M.D.

Introduction.

Hospital reports generally contain the records of cases which have occurred in the hospital during the past year, or at all events quite recently; and this is probably the first time that these or any similar reports have published accounts of cases which were under treatment more than two centuries ago.

The very curious observations which follow were made by a surgical pupil or young surgeon for his own use, apparently without any view to publication. They have, therefore, the merit of being entirely genuine and original, and they speak of persons and things with a frankness which would have been hardly possible in a published work. The MS. containing them is preserved in the library of the British Museum, being a part of Sir Hans Sloane's original collection, which was commenced at the end of the seventeenth century. It is printed precisely as it is written,

some obvious slips of the pen only being corrected; but the curious spelling and the capricious use of capitals have been for the most part retained, as characteristic of the writer and the time.

The writer, like all intelligent students, has not failed to compare his own observations with the statements of text-books, and his quotations from them have been given at length (after careful collation with the originals), as they show what were regarded at the time as standard surgical authorities. Some of these old books may still be found in our hospital library, though they can hardly be the actual copies which James Molins used.

Before saying more about the MS. itself it will be worth while to give a short account of the writer himself, whose private notes have now attained a publicity which he can have little expected.

James Molins belonged to one of those professional families which we so often meet with in the history of medicine. It was a family eminent in surgery through the whole of the seventeenth century, or, in the words of the epitaph of one of them, "his family for many generations has produced men very eminent in the art of chirurgery." The earliest of whom we have any record was James Molines (or Mullins), a member of the Company of Barber Surgeons at the beginning of the century. In 1625 we find him one of the Wardens, and in 1632 Master of the Company.[1] He was also on the staff of St. Thomas's, for we find in the records of St. Bartholomew's Hospital that he was appointed, 20th January, 1622–3, "Surgeon for the Stone to St. Bartholomew's and St. Thomas's Hospitals, at a stipend of £30 yearly, £15 from St. Thomas's and £15 from St. Bartholomew's:—also to be allowed two pounds of towe for every patient for their more easie and warmer drainage."[2] Our own records do not state the precise date of appointment, because the election was deputed to a joint committee of both hospitals, and does not appear in the hospital Court-books.

In explanation of the title given to his office it should be

[1] 'Annals of the Barber Surgeons,' by Sidney Young, 1890, p. 8.

[2] Sir James Paget, 'Records of Harvey at St. Bartholomew's Hospital,' 1846, p. 30.

stated that the operation of cutting for the stone was then, and for some time after, not entrusted to all the surgeons of the hospitals, but only to those specially competent. The "surgeon for the stone" was not necessarily surgeon for general purposes, but sometimes combined both offices.

James Molines was clearly an eminent man in his day, but has left nothing written as evidence of his knowledge. He died in or before 1639; for in the St. Bartholomew's records it is stated that his *eldest* son, EDWARD MOLINES, was appointed July 6th, 1639, "Chirurgeon for the cutting of the stone to the Hospitall, with the yearly stipend as his father deceased." There is no corresponding record in the St. Thomas's court-books, but they show that EDWARD MOLINES had been *surgeon* to St. Thomas's during his father's lifetime, and he probably now succeeded him as surgeon for the stone.

Edward Molines was a man of a turbulent spirit, and had what is called a chequered career. He was fined for insubordination by the Court of Barber Surgeons. On the breaking out of war between the King and the Parliament he espoused the Royal cause so warmly that he left his work at St. Thomas's and joined the King's army. Ultimately he was taken in arms against the Parliament at Arundel Castle, and in consequence the House of Commons sent an order to the Governors of St. Thomas's to deprive him of his office as surgeon, which was done 25th January, 1643–4. After the Restoration King Charles II sent a similar letter to the Governors to restore his supporter; but the difficulty was that the place had been filled by the appointment of Thomas Hollyer, who had done the work for several years, and whom the Governors did not wish to displace. After prolonged and adjourned discussion the difficulty was solved by making Molines a fourth surgeon, so that there were to be temporarily four surgeons instead of three. But the stipends were to be reduced, so that each was to get £30 per annum instead of £40 as before.

This little episode gives us precise evidence as to the remuneration of the surgeons at that time. It is also interesting as showing the relation of the hospitals to the Crown. We find several instances of letters sent by the

King to the Governors recommending particular persons as surgeon or physician, or sometimes for other offices in the hospital. Although the Crown had no legal power of appointment, such a recommendation had almost the force of a command, and sometimes put the Governors in a position of difficulty. Generally there were long discussions and adjourned meetings; but in the end the King's choice was acted upon. This was especially the case under Charles II and James II. After the Revolution of 1688 the Crown does not seem to have interfered.

Edward Molines died in the enjoyment of his offices in 1663, and soon after his son James Molins petitioned to the King for a mandamus to the Governors of St. Thomas's and St. Bartholomew's Hospitals to grant him the reversion of his father's place as Surgeon to the said Hospitals.[1] Accordingly on 23rd October, 1663, the King wrote to the Governors of St. Thomas's Hospital recommending James Molins to succeed his father as Surgeon to the Hospital, "he being eminent in his profession and deserving of encouragement." The original letter is still preserved in our archives. There seems to have been no objection to James Molins, and he was forthwith elected.

This James Molins (second of the name) was thirty-four or thirty-five years old when elected, and held the place of Surgeon to the Hospital more than twenty years. He was Surgeon to Charles II and James II, and on the occasion of a royal visit to Oxford in 1681 received the degree of M.D. from the University, so that he was evidently a man of much eminence in his day. He died 8th February, 1686, aged fifty-seven, and was buried in St. Bride's Church, Fleet Street, where a tablet to his memory may still be seen. It describes him as Master of Chirurgery and Doctor of Medicine, Servant to Their Majesties King Charles II and King James II, and adds a statement about his family which I have already quoted. Strange to say, he has been confounded by several biographers (including the learned author of the Roll of the College of Physicians) with his own grandfather.

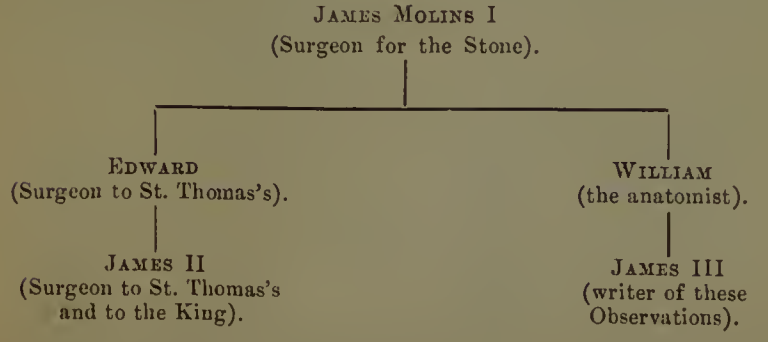
It was not this James Molins, but a cousin and namesake of his, who wrote the Observations which are here re-

[1] 'Calendar of State Papers,' Domestic Series, Charles II, 1663–4, p. 311.

printed. The exact relation of this writer to the family is not quite clear, but I conjecture that it was what I now propose to explain.

Another surgeon bearing the name of Molins, of whom we find records in the seventeenth century, was WILLIAM. He was a good anatomist, wrote a little book about anatomy, and lectured on that subject at Surgeons' Hall. His only connection with St. Thomas's was that we find in 1640 a mention of "William Molins, Barbour-Surgeon," as a tenant of the hospital. From this and other facts it is evident that he was contemporary with Edward Molins, and may very probably have been his younger brother—a younger son, that is, of James Molins the first (Edward being, as above mentioned, the *eldest* son). Now if this William had had a son named after his grandfather and uncle James, he would have been precisely the person to have written these observations. He was cousin, as he tells us, of James Molins, the Surgeon to St. Thomas's; he was the son of a surgeon, and evidently interested in and well acquainted with anatomy; in fact, just such a young man as might be expected to come of such parentage and descent. It is, of course, purely conjectural that this writer was actually the son of William Molins, but this supposition is perfectly consistent with the facts, and in the absence of proof may be allowed to be highly probable.

In order to make this family history clear I will venture to give a pedigree of the Molins family, partly ascertained and partly conjectural.



We will now consider what may be collected about the

actual writer of these notes, James Molins the third, from his own manuscripts. Something may be gleaned which is not without significance.

In the first place it is clear that he was pupil or apprentice of one of the surgeons of the hospital, and very probably of his cousin and namesake whom he so often quotes. If so, the cousin would also be the "master" referred to in the last Observation. The other surgeons at the time were, as I gather, Mr. Hollyer and Mr. William Pearce.

We must not suppose that he was in the modern sense a student of the hospital. The only students at that time were the surgeon's pupils or apprentices. Medical pupils there were few or none. In fact, strange as it may seem to our modern ideas, it was by no means the regular custom for those who were going to be physicians to attend the hospitals. There was no attempt at medical clinical teaching in England, though, as we learn from the St. Bartholomew's records, some few young physicians, having taken their degree at the Universities, used to visit the hospitals for a short time. But we find no mention in the lives of any contemporary physicians of hospital study in London; and I do not imagine that Willis or Sydenham, or any of the great physicians of the seventeenth century, except those who went abroad to Leyden or elsewhere, ever entered a hospital for the purpose of study. It is not till well on in the eighteenth century that we find the surgeon's pupils at St. Thomas's allowed for a small additional fee to attend the medical practice.[1]

At this time the education of physicians and of surgeons was entirely separate; the surgeons learnt no medicine, and the physicians no surgery; as might, indeed, be inferred from

[1] St. Thomas's was at this time the largest hospital in London. According to a return in 1667 the numbers were—

St. Bartholomew's—	*Relieved during the year*	1383
	Buried	114
	Remaining	196
St. Thomas's—	*Relieved during the year*	1241
	Buried	144
	Remaining	255

But both hospitals were considerably enlarged by new buildings about this period. —(From Green's 'State Papers,' Domestic Series, 1667 under date April 8th).

a singular story recorded in these Observations relating to the great Dr. Willis.

As a surgical pupil James Molins was, however, a studious and well-educated young man. What his studies were we can form a notion from the volume in which these Observations are contained (Sloane MSS. 3293). It is a book in small folio, nearly filled with notes, all in the same handwriting, and with the writer's name signed in several places. The contents are chiefly transcripts from books made for the writer's own use, according to the following list :

"*A Catalogue of the books I have transcribed.*

"Of the Cautery.
"Of wounds of the head.
"A tretise of Ulcers.
"Of tumours.
"Johannis Arderni translatio.
"Of Osteologia.
"De Musculis.
"De lue Venerea.
"The Index of Diseases.
"The Account of St. Thomas's Hospital Practice and Patients."

The first four of these are from the works of Gabriel Falloppio, or Fallopius, an Italian anatomist and surgeon of the sixteenth century, so that they were not even then very modern. Whether Molins really had any notion of publishing these it is hard to say; but he has written a singular preface, which I insert. It should be noticed that it was written three years earlier than the hospital notes.

"Courteous Reader,

"Accept this Inconsiderate treatise as an "humble oblation of a young Practitioner, one who is so "far from being skilled in the cautioned application of the "Cautery that the very name of Cautery was as difficult for "him to understand as the use of it, both being things "beyond his capacity. Yet encouraging my selfe that as "those who have been well skilled in Chyrurgery were att "first as ignorant as I, untill by their industry and study,

" they despersed those misty vapours of their understandings, " so I (by their example), endeavor to perfitt myselfe in the " knowledge of itt. Thus proposing with myselfe that I (not " being ignorant in all Chyrurgicall denomiuationes and ex- " pressions) should undertake at the first reading over of " any author, perfectly to understand his true meaning and " method; that this I say would surpass my weake appre- " hension, with little benefit to my understanding. I " judge it therefore much better to transcribe an approved " author [carefully] than to read him over many times. For " by transcribing I engrafted the sense more into my memory. " Likewise I understood the true meaning of every sentence, " and so made those expressions familiar to me, which before " were unknown, and I must ingeniously confess that this " way is laborious, yett that many benefitts that [accrue] " will [repay] the labor and trouble.

" I speake this to young beginuers (as my selfe am). " But to those who are well grounded in Chyrurgery, they " will gain as much by once reading an author as a young " beginner shall in 3 or 4 times. In these followiug Trea- " tises are found many errata, which may be excused " through the indiscretion and the inability of the tran- " scriber,

" Who is
" Youre Loving Friend,
" James Molius.

" January the 1, 1671."

The translation of John Ardern's book does not appear; but, as will be shown below, there is something which suggests that it was well known to the writer. The anatomical chapters on bones and muscles, &c., are not of much importance, but they are introduced with a curious invocation to the reader.

" If yee doe not despise the Curiouse study of Anatomy, " or if yee delight youre selfes in the Science of Physick or " Professions of Wisdome, I assure you that the subject of " this treatise is not to be despised."

The rest of the volume contains nothing important, except the Observations on St. Thomas's Hospital.

This record of an industrious surgical apprentice's studies and observations will give us some notion of what surgical education in those days consisted in. Apprenticeship with practical instruction of an informal kind was, of course, the backbone. There were no lectures on surgery, or, indeed, on any other subject except anatomy. The anatomical lectures at Surgeons' Hall had a great reputation, and though they would doubtless seem superficial to us now, were systematic, and illustrated by careful dissections—dissections, that is to say, made by the teacher, not by the pupil. There is no record of students dissecting regularly, and the regulations quoted in our Calendar about students not dissecting bodies without permission of the Treasurer probably referred to post-mortem examinations. The anatomical lecturers at Surgeons' Hall were generally Doctors of Medicine, Fellows of the College of Physicians, and some of them were of high repute, but they represented the whole anatomical teaching of London. Surgeons were strictly forbidden to dissect elsewhere than at the Hall, and a breach of these rules got the great Cheselden into trouble with the Company. It was not till the beginning of the next century that he introduced anatomical lectures in the hospital.

Besides these lectures, there was no means of learning any branch of medical science except from books, and books were therefore more important then than they were later. It will be noticed that Molins quotes from no English writer; the fact being that at that time there was no text-book of surgery worthy of the name written by an Englishman, and the English anatomical text-books, though several existed, were mere compilations. Even the pretentious work of a surgeon of St. Thomas's, John Browne, called *Myographia*, published shortly after the date of these Observations, hardly deserves a better name. For all surgical literature we were dependent on foreigners.

James Molins, at all events, seems to have made the most of his literary resources. He was a diligent reader, and brought his readings to the test of fact. If we assume that he possessed in addition the practical skill which was an inheritance in his family, he must have been a young man of great promise, and one wonders he was never heard of

again, favoured as he was also by circumstance and connexion. Perhaps the least welcome explanation may be the likeliest, that he died young.

> "But the fair guerdon when we hope to find,
> And think to burst out into sudden blaze,
> Comes the blind Fury with the abhorrèd shears,
> And slits the thin-spun life."

Possibly, however, he lived and flourished in a less conspicuous position than that to which his talents and his family connexions might have been expected to raise him.

J. F. P.

ANATOMICALL PRACTICALL OBSERVATIONS

IN

ST. THOMAS HIS HOSPITALL.

PER ME J. MOLINS.

July 14th, 1674.

1. A Shoemaker aged about 40 yeares of Age received a great Contusion on his leg, he lying in the cold it mortifyed. I made large scarifications and applyed good warme Medicines to the part and in 3 weekes he was cured.

2. A maide aged 25 yeares laboured under a large Impostumation *in Inguine*. I discharged the matter and laid the Cavityes open both upon the Abdomen and the Thigh. She was cured in a month's time; she was not able to goe when she came into the House but upon this Discharge she went as well as ever she did.

3. A Servant Maide aged 21 of an Ill habit of body and red-haired, with a suppression of the Menstrue, came in with a Mortification upon her leg about the gartering place. (her Mrs. attempted to make her an Issue in the part by a Spanish Fly, and there came down such a Defluxione that it caused with the paine, mortificatione). Wee scarified and used our usuall method and checked the mortificatione. When the sore was almost cured, the Doctor gave her a

Vomit and some other things which disturbed the Humor soe much that her sore flew out againe almost as bad as ever. With much adoe wee brought it to digest againe and upon the second healing she fell into a feaver which had like to have killed her, but it pleased God that she recovered, her sore healed, and she turned out of the House well.

September 14th, 1674.

4. Dr. Willis's[1] Coachman's wife by Violent Coughing distended or broake the great Artery. The Artery by Degrees and its continuall Pulsations worked through the upper part of the sternum and dilated it's self in the Skin to the magnitude of a man's fist. She went to Dr. Willis, who told her that it was a Wenn, and ordered something for her at his Apothecarye's, which was nothing else thau Paracelse[2] and Bole mixed together but she fouud no benefitt. She went to severall persons, and at length she litt on one who attempted to open it aud he making his Iucision just through the Skin discharged only a little Serum, and told

[1] Dr. Willis was the great Thomas Willis, eminent for his anatomical and physiological researches on the brain, the discoverer of saccharine diabetes, and one of the greatest names in English medicine. He had been Professor of Natural Philosophy at Oxford, but in 1667 had come up to London, aud was now in large practice, the leading physician of the day. Notwithstanding all this, he does not seem to have recognised a pulsating aneurism when he saw it.

The following works of Dr. Willis are in the St. Thomas's Hospital library:— 'Opera Omnia,' quarto, Amsterdam, 1682; 'Pharmaceutice Rationalis, or an Exercitation of the Operations of Medicines in Human Bodies,' London, 1684.

[2] *Paracelse* was a plaster, probably the *Emplastrum stipticum Paracelsi*, which is recommended by Woodall in 'The Surgeon's Mate' (1639) as one of the first requisites in the surgeon's chest. Woodall does not give the composition, but there are several prescriptions for plasters in 'Paracelsus's Surgery' ('Die grosse Wundartzney,' Ulm, 1536, folio). That which the author praises most was composed of beeswax, colophony, and cobbler's wax, with which were blended gum ammouiacum, bdellium, amber, aud powdered magnet (magnetic iron ore). This was so powerful, it could draw an arrow-head out of a wound! Another receipt for Paracelsus's plaster, in 'Schroder's Dispensatory' (London, 1669), gives besides gums, &c., mummy, loadstone, white and red coral, with a number of other ingredients. *Bole* means Bole Armeniac, a reddish earth brought from Asia Minor (originally from Armenia), which was used as an astringent externally aud internally. (Two editions of Woodall's 'Surgeon's Mate' are in the Hospital library, viz. 4to, London, 1617; and folio, London, 1639.)

her that now he had made a vent and nature would throw it out and she would doe well. The woman was very much encouraged by this Advice but finding the Consequence prove to the Contrary, she complaining of much paine, besides despairing that she should ever doe well reduced her into a Consumption. The woman came one afternoon to my Coz. J. Molins, and there was Dr. Torlesse, Dr. Brady, and Mr. Carew, and I. The woman showed her Tumor which had a little excoriation on the top of it and looked as though there was a Slurfe, which was the very externall Coate of the artery with a great Pulsation upon a vein. Wee told her that it was Immediate Death whenever it was opened, and withall desired her that whenever it breake she would send for my Couz. and he would doe the best he could for her. Away she went but her paine continuing rather more than ever (for it had continued upon her above a yeare and a halfe) she went to one Wakeman a Chirurgeon, who attempted to pull off the Slurfe and in pulling off the Slurfe proveing as wee supposed before to be the coate of the Artery, immediately followed a great Flux of blood. Itt flew out in a streame as big as a Man's Thumbe, and leaped and spouted as if it came out of a Fountaine. Immediately he compressed it with his fingers and Thumbe, and applyed his Calchanthum[1] to itt with a hand pressing upon it, continually renewing his Stupes diped in Rosat. At this rate it was stopped for 7 or 8 houres, then it flew out againe as before, he made a Shift to stop it for some time, yet still with a greate losse of blood and the third Flux which was within the 24 houre she Dyed. After she was Dead, my Couz. haveing made his Interest, had the conveniency to open her. Her Case was thus: in the upper part of the Artery was contained Grumouse blood; the Sternum was Perforated through the Cartilaginous part of it, and the adjacent bones foule (by the lodging of the coagulated blood). The Artery (which was a branche of the Ascending Trunke of the great Artery) was dilated to the magnitude that it

[1] *Calchanthum* = Chalcanthon, flos æris, flower of copper, properly the scales which fly off when red-hot copper is quenched in water; but also meauing vitriol, green or blue, sulphate of iron or copper, which were used as styptics. *Rosat* means probably Oleum Rosatum, or oil of roses, also regarded as a styptic.

would containe an egg; rather bigger than that which Riverius[1] gives you account of in his observations (where he treats concerning an Aneurisma) and dilated very largely in the Right Ventricle of the hearte; the coate of the Artery was very thick and in some places cartilaginous (like little flakes of Ice). Ambrose Parey (Lib. 7, Cap. xxxii)[2] treating of an Aneurisma gives you this Deffinition that "An Aneurisma is a soft tumor yielding to the touch, made by the blood and spirit poured forth under the Flesh and muscles by the Dilation and relaxation of an Artery. Galen calls an Aneurisma an opening made of the Anastomasis of an Artery. An Aneurisma may be made when an Artery that is wounded closeth too slowly. The substance which is above it being in the meanetime agglutinated, filled with Flesh and cicatrized which doth not seldome happen in opening of Arteryes unskillfully performed and negligently cured. Therefore Aneurismas are absolutely made by the anastomasis, springing, breaking, Erosione and wounding of the Artery. These happen in all parts of the body but more frequently in the throate, especially in women after hard travaile. * * * The Cause of such a bony Constitution in the Arteryes by an Aneurisma is for that the hott and fevered Blood first dilates the coates of an artery, than breakes them, which when itt happens, it then borrows from the neighbouring bodys a fitt matter to restore the loosed continuity." Thereof Joannes Johnstonus in *Idea Medicinæ*, (Lib. 6, Cap. viii, page 288)[3] dixit; "*aneurisma est tumor ab arteriæ tunicæ*

[1] Lazare Rivière, or Riverius (1589—1655), was a famous French physician and professor at Montpélier. He was one of the first teachers who combined the "Spagirical" or chemical therapeutics with the older "Galenical" methods. He wrote 'Praxis Medica,' 'Observationes Medicæ' (containing some hundreds of cases), &c. These works were extremely popular, and some were translated into English. Several may be found in the St. Thomas's Library.

[2] "The works of that famous chirurgeon, Ambrose Parey, translated out of Latin and compared with the French by Tho. Johnson," folio, London, 1649, p. 224. [St. Thomas's Hospital Library.] The standard text-book of surgery in the seventeenth century.

[3] 'Idea Universæ Medicinæ practicæ,' 8vo, Amstelodami, 1648. John Jonston (1603—1675) belonged to a Scottish family resident in Poland, and was born there. He studied philosophy at St. Andrews, medicine at Leyden and other places, including London, which must have been in the time of Harvey, but returned to the Continent and practised in Poland. He was a man of immense

"*interioris apertione, exterioris, dilatatione exortus. Cogno-*
"*scitur quodsit tumor mollis, pulsans digitis plerumque cedens,*
"*et si non cedit, nec pulsus est quod in magno accidere possit,*
"*tamen strepitus quasi bullientis aquæ ob spirituum per an-*
"*gusta meatum percipitis. Et sic ab Ecchymomate distin-*
"*guitur, Oritur vitio arteriæ, quæ ratione tunicæ internæ*
"*quæ dura et crassa aperitur; ratione externæ, quæ tenuis,*
"*mollis, et rara, dilatatur. Id fieri solet vel a sanguinis*
"*impetû vel ab aliquâ violentiâ, sæpissime cum vel arteria pro*
"*venâ secatur, vel cum vena simul arteriâ læditur. Tum*
"*enim exteriore tunicâ utpote molli et venarum tunicis cognatâ*
"*coalescente, internâ apertâ, per foramen sanguis et spiritus*
"*erumpere conatur et externam distendit.*"—Per me J. Molins.

October 25th, 1674.

5. Mr. Bostock aged 40 labouring under the King's Evill from his Childehood, it had broke out in severall parts of his body before, and part of the *Os femoris* had formerly been exfoliated; att length jumping out of a coach he sprained his ankle, and the Humors falling downe fixed there and came to an Œdematouse Tumor. Many for the space of 3 yeares had him in hand; they had claped on the Caustick and given a very good Discharge and thrown in their Injections, but all to noe purpose for the space of 3 yeares or more, untill he was extenuated very much by the large Discharge of the matter and the Vehemency of the Paine. At length he condescended to loose this troublesome Member and my father was picked out as the operator; all things being provided according to the old authentick way, a Person steps up and objects against it and nothing must serve the

learning, and wrote many works in Latin on philosophy and science as well as medicine. The best known was his 'Natural History,' in six folio volumes (Frankfort, 1650, &c.). Several of his works were translated into English and other modern languages. The work here quoted is a compendium of the whole of medicine for the use of students. It seems not to have been so widely known as others of his books, and is somewhat old-fashioned for its date. In the quotation above it is noticeable that a "noise like boiling water," *i. e.* a "murmur," is given as a sign of aneurism. This, which is mentioned by Ambrose Parey and others, was one of the earliest applications of auscultation to diagnosis.

turne but the *Aqua Regalis Stiptica*[1] must be applyed to the Stumpe. It was agreed on more by the desire of the party himselfe and his friends than by the free consent of the Chirurgeons that were assistants. This scruple being solved wee went about the Operation which was done very expeditionally and cleverly and the gentleman underwent it courageonsly. The water was applyed bnt tooke no effect as was presupposed, but after a short time, over the Rag that was dipped in the water he claped on the bladder, and rowled it pretty straight and even and laid him into his bed. He had upon him before he lost his leg a violent Cough; he complained of a violent burning pain at the end of his Stumpe. Per the night he had a Narcottick, and he rested very well, better than he had done by his owne Confessions in 3 yeares before. Thus all things came on very well, we had an Ichor come away which gave a breathing to the Stumpe. Wee had nothing stirred, bnt a discharge of bloody Ichor, which is usual; he was drest up very warm with a good Digestive; there was upon his knee a little Impression of the Rowler, though he had a good Defensitive Plaister on his knee. In a matter of six Dayes time wee had indifferent good Digestions, yet still his stomach failed him upon the seventh Day; he had little vomitings and inclining to a Feaver, and that which was no more than Ecchymosis all the last weeke turned to Mortificatione. This made us more fearful than ever. The Mortificatione on the knee was scarified, yet the Stumpe continued Florid and some small quantity of matter came away, all which gave ns some hopes. This mortification in some short time digested, the Slurfe began to cast off the Stumpe indifferently well. Thus were we wavering, hoping that nature would have helped ns and he remaining very weake still growing worse and worse in his body, till the 20th Day, and then his Stumpe runn bnt little, the matter reverst into the habit[2] and flew out in an Aphtha and on the 24th Day he Died.

[1] This name does not occur in the 'Pharmacopœia Londinensis' of 1662; it was probably some empirical or secret remedy.

[2] *Habit* properly means the general state or condition of the body, but was used by surgeons at the time much as we now use the word "system." The meaning is "the pus was absorbed into the system." *Aphtha* probably means some sort of eruption.

6. William Watton a young Fellow at the Hospitall labouring under a Feaver with a loosenesse, at length it terminated in the left buttock in a large Imposthumation which breake of itself before we knew of it. One Day being called I layed the part open indifferent largely and drest up warme the next Dressing I found the Musculous Substance underneath mee very foule, all the adjacent parts loose, and the matter lodged underneath mee under the Glutei. I clap'd him on a good warme Dressing and a Bolster under the depending part, and rolled him up with a good warme Stupe. In some time his feaver abated, his loosenesse went off, and as the adjacent parts mundified soe it incarnated, and in less than 6 weekes he was perfectly well.

December, 1674.

7. A middle-aged Seaman having an Impostumation on his knee from a former Contusion it breake of itselfe before he came into the Hospitall, when I saw it immediately I layed itt open obliquely—very largely it being only Cutaneous, and in a month's time was well.

8. A Fellow came in on our Day that had an œdematouse Tumor in the foote, but had formerly been Salivated by a Physician in the country which had checked the matter and eased him as long as the Salivation continued, but when once it stopped he fell into violent paines especially in the Night and he had no ease till it flew oute into his foote at which place Nature disburthened herselfe. The Fellow found reliefe, but still it runn very much, the bones of the foote foule. Wee advised to loose his Member but he was unwilling. At length he had the Small Pox which killed him.

9. An elderly Man haveing a large Ulcer upon the Os Tibiæ for many yeares came to be cured and as wee healed the ulcer he fell sick then we lett it alone and Nature discharged herselfe and heal'd it againe and he fell into a loosenesse. At length we turned him out uncured.

10. An old Man a Sawyer by Trade having a Contusion upon his Skin there threw out such Fungous [Granulations]

that all the Escharotticks that we applyed signified nothing ; but still it flew out upon us againe and at length we applyed Aq. Cœrulea[1] and Cured him.

December 7th, 1674.

11. One aged 45 yeares laboured under a Fistula *in ano*. He was Mr. Peirce's Patient ; sometimes vomittings, suppression of Urine, Gripes, and his ordure came away involuntarily ; when the Fistula runn he was better ; then when it stopped he was as before ; at length he Dyes. After death Dr. Paulis and I opened the Body. His Belly was very much Distended. After I had rayscd the skiun I tooke off the sternon. The Lungs large and discouloured as in persons that dye suffocated, and no adhesion on the Pleura. The heart large faire and good and no Quantity of water more than its usuall serum. The Diaphragma was protruded upwards by the large Distentione of the Intestines above a foote. The liver large and good the Vesicula Fellea large and oblonge, differing from its own Piramedicall forme ; the Splecne naturall. The Ventricle naturall and much contracted, the Small Intestiues naturall both in bigness and colour. The Cæcum we found naturall but two valves ; the Colon and Rectum prodigiously dilated with wind. At the Anus we found a multitude of blinde Hemerhoids, spongy and relaxt, which I doe suppose was the Cause of the involuntary comeing away of his Ordure. The Externall Sinus perforating the Anus; little Callosity, but the Anus discoloured. The Kidneys faire and good. The Ureters free without obstructions, for we threw our Injection freely through both ureters into the bladder ; the Bladder contracted, good and naturall. The Doctors' opinion which I apprehend was very rationall was this : That the Spongy Piles did attract a contiuuall afflux of Humors, soe that weakened him, and upon the reverse of this matter into the blood, it hindered the separation of the internall parts, and made him labour under all the precedent symptomes, and in Conclusion Death. He found a great Deale of Benefitt in Troch. Gordonis.[2]

[1] *Aqua Cærulea.* This is not in the Pharmacopœia. It was probably a lotion of blue vitriol or sulphate of copper.

[2] *Trochisci Gordonii,* the noted lozenges bearing the name of Gordon of

12. A Boy aged 10 yeares old laboured under a large Impostumation in his right Thigh being the Termination of a Precedent Malignant Feaver, this possest the whole Thigh. I discharged all the dependent part under the Ham betweene the two Tendones, we had a large quantity of fœtide Matter every Dressing. The Bone of the Thigh carious. After some time I clapped on the Caustick largely on the middle of his Thigh in the thinest place, and I went boldly to the Superior Orifice. We had a Discharge the next Dressing and in a month's time all dryed up and seemingly well. The Boy came to his Stomack and would goe, and his leg grew strong.[1]

December the 18th.

13. A Middle aged Man seemingly Hydropicall was admitted into St. Thomas his Hospitall as the Drs. Patient; sometimes he was better and sometimes worse;—an Intermissione pulse; Asthmaticall, and Obstructions in making water; jaundice, his legs and armes swelled; and 2 Dayes before he Dyed a totall suppression of urine. After he was Dead I opened him, opening the lower venter, which seemed but very small, considering him Hydropicall. Wee found noe quantity of water, but what was usuall, the Liver Schirrhous and præternaturally large, the kidneys and all other organs sound. After I had taken up the sternon I had a large Tumor underneath mee *in Pericardio*, and a large quantity of water contained, as I suppose to a Pottle. It was of a yellowish Colour; the Heart as long as a Bullock's; the right Auricle very largely distended. Upon the opening of the Auricle I founde a large yellowish viscouse substance expanded over the whole Auricles. It had no particular adhesion but from its common membrane; the same substance was also in the right and left ventricle of the Heart, but none in the left Auricle; but that was naturall

Montpélier, a physician of the fourteenth century. They were composed of twenty-six ingredients, beginning with "the four greater cold seeds," viz. seeds of cucumber, gourd, melon, and water-melon; including also Bole Armeniac dragon's blood, ashes of ivory, myrrh, &c. To which of these ingredients they owed their virtues it would be hard to say.

[1] "Came to his stomack" = regained his appetite.

both in its colour, shape and largenesse; the substance of the heart naturall. The Lungs very small, in their colour like the spawne of frogs, and a general adhæsione to the Pleura. Nothing else observable but in the raiseing of the muscles of the Arme and thigh a discolour'd serum contained betweene every Interstice. Of this substance that I tooke out of the heart which look'd and shined like fatt yet left noe unctuocity upon the touch, I put one piece upon a Coale of Fier and it shrunk up to a Coale, I put another piece into a Skillet, and boyled it up for a considerable time and at length it came to a substance like White leather, a third piece I keepe in my pocket, to see what the warmth of that would produce. And I found it turne to the same Substance as Snot or Fleme would when it was dryed. The biggest Piece (which I took out of the right Auricle) weighed oz. 11 wanting 3i. I put it into a cleane Porringer, and exposed it to the Ambient air, and that shrunke away to a skinn.

As to the Deffinition of the Dropsy, in Latin *Intercus*,[1] in Greek *Hydrops, nomen Sumpsit ab aquoso humore cutis; Aqua Intercus.* According to Ambrose Parey (L. 8: Cap. xi: Page 299,) the Dropsy is a Tumor against nature by the abundance of a waterish Humor of a Flatulency or Flegme, gathered onewhile in all the habitt of the body, otherwhile in some part, and yet especially in the capacity of the Belly betweene the Peritonæum and the Intestines. From this distinction of places and matters there arises divers kind of Dropsys (one as to our purpose among the rest *Pleurocele* and *Hydrops Pericardii*). Yet they all arise from the same cause, that is the weaknesse or defect of the altering or concocting faculties especially of the Liver which has been caused by a Skyrrhus or any kind of great distemper chiefly cold, whether it happen primarily or secondarily by reason of some hot Distemper dissipating the native and in-bred heate. Such a Dropsy is uncurable, or else it comes by consent of some other higher or lower part: for if in the Lungs, heart, midriffe or Reines there

[1] *Intercus.* This curious word, which is found in classical as well as in medical Latin writers, is explained as meaning:—*aqua inter cutem* = water in the skin, dropsy of the subcutaneous tissue, or anasarca.

be any Distemper or Disease bred it is easily communicated to the Gibbouse part of the Liver by the branches of the Vena Cava which runn thither (as in this person the Vena Cava was very largely distended especially in the Ascendent and Descendent part of it from the liver) but if the mischiefe proceede from the Spleene, Stomacke, Messentery, Guts, especially the Jejunum and Ileon, it creeps into the Hollow side of the Liver by the Meseraicke Veins and other branches of the Vena Portæ, for thus such as are troubled with the Asthma, Ptysicke, Spleene, Jaundice and also thee Phrensey fall into a Dropsy: Joannes Riolanus[1] (*Lib.* 3 *Cap.* 8 *De Corde et page* 301 *in Consideratione Medica*) *Dixit "sœpe mentitur et præ se fert speciem apoplexiæ, sed sine stertore nec relinquit post se Paralysin vel Paresin. Si sœpius fortior recurrat, tandem cor obruit et suffocat, non tantum ob interceptum sanguinis excursum, ex plenitudine vasorum, sed ex oppressione cordis, ab aliquâ crassâ substantiâ sanguinis, intra ventriculos cordis impulsâ, quæ ἀσφυξίαν adfert in motu cordis et arteriarum; interdum ἄφασιαν; tandem interitum. Hic affectus Germanis æque familiaris ac apoplexia, ex athletico corporis habitu qui contrahitur ex comessationibus et perpotationibus assiduis potissimum in prandio quod protrahitur in horas nocturnas; nec tamen curant istum habitum plethoricum exsolvere venæsectione liberali. Nec mirum si a tantâ sanguinis copiâ incidant in apoplexiam vel syncopen cardiacam. Frequentius obstruuntur ventriculi et septum medium dum replentur frustulis carneis vel adiposis quibus cor suffocatur interceptâ circulatione sanguinis. Interdum hœrent in auriculâ dextrâ et palpitatio aut pulsûs inæqualitas vel interceptio sœpius accidit. Intercipitur circulatio non tantum in corde sed etiam in venis ubi obstruuntur a crassiore sanguine, vel*

[1] 'Encheiridium Anatomicum et Pathologicum,' a Joanne Riolano, 8vo, Lugd. Batavorum, 1649, p. 225. [St. Thomas's Hospital Library.] Jean Riolan the younger (1580—1657), an eminent physician and anatomist, was Professor of Anatomy and Botany in Paris. Though he did good work in anatomy, he was an obstinate opponent of the doctrine of the circulation. Harvey published a reply to Riolan's objections, in which he speaks of him as "the Prince of Dissectors of Bodies." He wrote a large work on anatomy ('Anthropographia'), and the smaller book here quoted, which was translated into English by Nicholas Culpepper, with the title 'A Sure Guide to Physick and Chirurgery, &c.' (folio, London, 1671 and earlier).

concreto instar medullæ sambucinæ, ut mihi sæpius apparuit post febres ardentes, et annotatum a Fernelio."

14. A young man having a stone thrust forward into the meatus urinarius it lodged just under tho frænum, and striving to take it out with the extractor, it was so bigg that it could not come out. At length my Couz. cut it out; the part was much swelled and putting back the Præpuce further than ordinary it bound soe behind that it had like to have mortifyed the gland and all that was before it. I cut tho Phymosis and he did well, but the urine runs out where the stone was cut out and I believe will doe soe all days of his life.

15. *The Woman's Case in Bloomsbury, January the 4th, 1674-5.*

Labouring under the Dropsy ever since Bartholomew tide last past (the first Cause of her swelling was as she supposed from a bruise on her Belly) at length she came to my Couz. James, who advised her to be tapped to which sho willingly condescended, which he did with his own Instrument to witt with a Canula, at the end of which was skrewed in a blunt-pointed Lancet yet so as it penetrated with little or no paine. Ho made the Paracentesis 5 times and at every time discharged a gallon and a halfe of water or rather more. The woman was very Couragious and Hearty but as the water was discharged she was troubled with a difficulty in breathing which was from the relaxation of the Diaphragma. The serum which was discharged was thick and yellowish. Every time she was tapped, a new aperture was made: at length she Dyed. When we came to open her we examined the Abdomen by compressione which felt as when she was alive, that is, Indurated and Knotty. When we opened the Belly we found all tho muscles sotten and the Omentum preternaturally tumifyed which had Glandulouse Swellings and Adhæsione of it to the Peritonæum; the Cavity repleted with large tumors of the Glandules; and various Cystes, depleated with a Mucaginouse matter: But one particular Cystis above the rest as big as a peck; wee tooke this out as carefully as possibly wee could, with all the adhering parts and in the separatione of the part, wee found him adhere to the Matrix. Wee tooke out the

Vulva and the Vagina Uteri along with it, and found the whole body of this large Tumor to be contained in the right Cornu Uteri. When we came particularly to examine it it had its intire Tunicle from the rest, and had in itt Thousands of the former Hydatides; wee guest it to weigh thirty pound. The Liver preternaturally large and Skyrrhus; the Bladder of Gaule was very largely distended; the Intestines all corrupted; the Matrix and Vagina sound and firme, and the left Cornu Uteri naturall; the Kidneys sound and good which are, as I may confidently affirm, soe in all Hydropicall persons. The Thorax repleted with water, the Lungs discoloured and wasted, the Hart though small yet firme and sound, and in its pericardium its naturall quantity of water, the Spleene large and somewhat discoloured. One thing I had allmost forgott which was that before she Dyed the last time she was tapped no water would runne which as afterwards wee found, was that all the liquid extravasated serum was discharged, and that which was contained in its peculiar Cystes could not be discharged. Another Remarque was that upon Incisione of the Skinn on the Tibia it cut like fat, which was nothing else than as all parts being repleate with the Lymphid matter, soe all the Glandules of the body were repleate with it; for it was acknowledged by many authors that every Pore hath its several glandule which was evident in this woman, excepting the glandules in the Breasts, which were totally dissolved that the bare Skin and nipple only appeared. As to the cause of this, I can only say *Quot homines tot sententiæ*. Yet I must thus far allow, that it is from an ill separatione in the habit, that cannot discharge that Lymphid matter but throwes it downe soe much upon the Lymphæ that cause him to dilate himselfe into soe many particles, and as wee acknowledge that he divaricates himselfe into every particular part soe he is particularly dispersed and dilated everywhere where he runs. That which was conteyned in its Cystis (which I take to bee nothing else than the Dilatation of the Lympha) cannot be discharged but that which is extravasated may be discharged. In order to what I have said look but into Barbette's Practice with Dr. Decker his Annotationes[1] (Cap. 4th, Lib, the 4th,

[1] 'Praxis Barbettiana, cum Notis et Observationibus Frederici Deckers,' 12mo, Lugd. Batavorum, 1669. [Edition of 1678 in the St. Thomas's Library.] Paul

page 158, De Hydrope) ibi Dixit. "*Hydrops est Collectio* "*præternaturalis Lymphæ seriosioris. Alii definiunt per* "*tumorem Corporis vel partis ejus preter naturam ob Humoris* "*aquosi, et serosi vel flatus Collectionem exortum; hujus* "*affectus descriptionem accuratissimam videris apud Hippo-* "*cratem* (*Lib.* 4 *De Morbis*, Text 33 and 34, Page 158, ad finem hujus libri).

"(2) *Pars affecta est Abdomen aut sæpe totum corpus omnesque ejus partes.*

"(3) *Causa proxima est Lympha serosior quæ tenellula sua vasa erodens, et sic extravasata gravissimum hunc morbum ægris infert. Et acrior lympha nam serosiora quâ serosiora non tamen erodunt sed quidem distendunt: distentioneque nimiâ vasa illa tenellula lymphatica rumpuntur; præcessâ prius* (*quantum ego observare potui*) *glandularum vasorum lymphaticorum obstructione, sicque nimis copiose effluit lympha, hydropemque excitat. Remotæ causæ variæ sunt, ut apud auctores est videre; inter quas sæpissime occurrit nimius spiritus vini usus imprimis matutino tempore assumtus, unde plerumque primo leucophlegmatici fiunt deinde ascitici; hocque fieri puto, quatenus vini spiritus famem* (*acidum ventriculi fermentum, sua volatilitate oleositate et pinguedine, ut patet ex flamma quam concipit spiritus vini, obtundendo et infringendo*) *aufert. Fermento acido ita obtuso, alimenta in ventriculo fermentari atque ab invicem sufficienter segregrari nequeunt, unde crudus atque corruptus chylus necessario producitur. Adde quod illi Lenæi heroës matutino tempore hoc spiritû vitæ* (*potius tum mortis*) *ita ingravati, propter fermentum obtusum vel extinctum nihil fere nec appetunt nec comedant, sicque cum Cerere divortium faciant. Sed ratione acrimoniæ salsæ quæ est in vino adusto* (*ut patet ex siti subsequente*) *vehementer sitiunt; unde jugiter ad tollendam illam acrimoniam bibere coguntur, sieque toto pomeridiano tempore non Cerealia sed Bacchanalia celebrant; quo fermentum forsan in ventriculo, relictum, dilnitur*

Barbette, born at Strasburg and educated at Montpélier and Paris, practised at Amsterdam with great renown in the seventeenth century. He wrote works on medicine and surgery which, without being original, were extremely popular. His 'Surgery,' written in Dutch, was translated into Latin, German, French, and English. His 'Medical Practice' here quoted was less widely known, but was also translated into English. In fact, he seems to have been a great authority with the medical profession in England.

abluiturque continuo illo potû nimio, sicque flaccidior ineptiorque ad concoctionem redditur stomachus; deinde cruditates augentur, minus laudabilis generatur chylus. Non potest non inde generari sanguis crudus serosus, pituitosus aliâve qualitate vitiosus; unde nutritio lœditur, obstructiones oriuntur, etc.; sicque illi Bacchi heroës Charonti aliquando traduntur.

16. A Ship boy falling downe the side of a Ship, upon the Stocke, in his fall he fractured one Arme, his Right Thigh and the left had a compound fracture. After they kept him att Woolewitch 10 or 12 weekes, they sent him up to the Hospitall. I layed the part iu a goode positione, wee had a very large Discharge of matter and the bone bare, yett for all this he had the Small Pox, then the matter stunck worse than itt did before and its colour was greene. The Pox rise to an Indifferent Height butt in 6 or 7 dayes they fell and he Dyed.

February the 4th, 1675.

17. The Porter haveing aboute a yeare before laboured under a fitt of sicknesse which terminated in his thigh and leg and Imposthumated;—which was discharged and incisione made according to Interstices of the Muscles, for the discharge of the matter. Upon the healing up of this he complaines of a great paine in his breast, and a violent cough which I suppose was the metastasis of the matter upon the Lungs, he spitt and expectorated a nasty fœtid matter, consumed, and in conclusion, Death. Afterwards I opened him. Upon the opening of the Thorax, there was an adhæsion of the Lungs near the Pleura and a large quantity of serum; in the lower Belly, little or none: I tooke all oute from the Clavicle to the Anus and laid them upon a table in plane. Upon the taking up of the Sternon, between the Mediastinum and Sternon was a Pus collected very frothy. The Lungs full of hard glandulouse knobs, Imposthumated and Mortifyed, especially towards the upper part of them where I suppose the matter first seized, for the lower part of the lobes of the lungs were indifferent sound. Upon the compressione of the lungs the matter came through the divaricationes of the Trachæa. His Hart exterually faire good, but in the right ventricle we found a viscouse small substance,

nothing nere so large as the last which I found, this being noe bigger than the little finger either in length or thicknesse. Its Pericardium firme and sounde with its naturall quantity of water contained. The Liver præternaturally distended in its Parenchyma, and Skirrhus, the Vesicula fellea large and repleted with a thick viscouse Choler. The Stomack and Intestines Infirme, the Kidneys and the Spleene sound.

February, 1675.

18. A woman labouring under Convulsione fits throw herselfe into the fire and lay there untill sho had burnt up one of her hands. She was brought into the Hospitall. She lost the Digiti but we saved the Metacarpi and in 10 weekes she was well.

19. A young woman labouring under a largo Mortificatione in her leg. We drest her up very warme, stopt the mortificatione, digested the eschar and healed her up.

20. One Saturday being the 20th of Febrnary, 1674-5 a Serjeant being very consumptive for a greate while, att longth dyed. I opened him and in the superior part of the Loft Lobe of the Lungs was a large Imposthumatione, most part of the Parenchyma wasted, and the remaineing part full of matter. The right lobe glandulouse and in each of these there was found more or less stones of a firme solid substance. In the Hart the same viscouse substance as in the last; the Liver sounde and the other viscera indifferent except the Spleene and the Mesentery; the one I tooke severall small round stones onte of, and the other full of glandules.

March the 20th, 1674-5.

21. One Mr. Coope a Chyrurgeone, aged neare an 100 yeares. Laboured under the Dropsy, and haveing had it aboute a yeare and a halfe, att length dyed. He was very much tumifyed. I opened him and found the Lungs faire and naturall. The Hart goode, but a substance like fatt aboute itt. An indifferent quantity of water in Pericardio. Tho Liver the best, butt the least that ever I see in any Hydropicall person. Its color and Parenchyma good and naturall, the Spleene præternaturally distended, in its sub-

stance discoloured, in its colouring white and its substance naturall. The Omentum throwne or contracted under the Stomack by the quantity of water (which was aboute 5 gallons) itt was discolored in its substance and rowled up. The Intestines discolored and the Mesentery glandulouse where itt encompassed the gutts. The body of the Mesentery thick, and repleted with Lymphæ. There was a large Perforatione through the productione of the Peritoneum in scroto (which accidentally happened by a wound formerly in scroto), and through the testicle which caused the loss of itt. This case may properly come under the name of Anasarca, because itt was totally dispersed through all the body. Through age his Beard was growne blew.

22. A Porter who dyed in the Hospitall I opened and found the Lungs replete with matter the rest of the parts indifferent sound.

23. A waterman who was taken in on the Monday and dyed on the Tuesday. He died asthmaticall, and Hydropicall. His Lungs adhered to the Pleura and were corrupted with a frothy sanies and very rotten, the Liver skirrhous and an indifferent quantity of water conteined in the abdomen, the vesicula fellea very much distended.

24. The Gardener haveing a large Imposthumatione in his backe which being ill managed att first by permitting the matter to lodge proved very painefull and troublesome. I layed him open (by crude incisione) in the dependent part to prevent the matter lodgeing. After that was well digested I found another cavity upwarde which I layed open and still as I opened I found new cavityse all which I layed open and he well in 2 months time.

June the 13th, 1675.

25. A woman opened in the Hospitall from whom was taken a dozen stones oute of the body of the right kidney, there remaineing noe more of the kidney butt a coate in which the stones were involved; the vesicula fellea largely dilated the magnitude of a Quart potte and the Porus Biliarius as big as a small Intestine and Skirrhus. She complained of a vehement paine on the same side and she was very Ictericalle.

June the 13th 1675.

26. James Bowes, Servant to the Warden of the Fleete makeing an arrest att the Palgrave's Head, an inne without Temple Bar, received a Blow on the Right side of his head being a contusione withoute a wounde. They lett him lye allmost a whole day before any thing was done to him att length they sent for my Coz. J. Molins who tooke me along with him. Seeing him speechless and in Coma, my Coz. after the apparatus was prepared immediately layed bare the skull by makeing a Circular Incision upon the part of the Bregma where the Contusione was most. As soone as wee had denudated the Cranion from the Pericranion we found a large fracture with a depressione under us, wee imediately stopped the Hæmorrhage and lett him lye till next day before wee opened him. He was immediately Bled and clystered and the part the cupping glasses were applied to scarified (in the afternoone my Coz. designed to apply the Trefina, butt upon the applicatione of itt, itt would not worke). He imediately apprehended he was upon a depressione, and with his levatory he raised pieces of the skull. There was a large Coagulum upon the Dura Mater, wee dressed him up and he spoke by the next day. Wee had good discharge from the Dura Mater and the patient pretty hearty for 4 or 5 dayse, but att length the Ichor grew fœtid, he flagged in his speech, turned deliriouse, and in 10 days time dyed. After he was dead I layd bare the whole skull and I found him deprest in the middle of the sinciput and a fissured wound about towardes the Occiputt, the Sagittall and Coronall Suture and over the Mendosa. I could compare itt to nothing butt a blow on the belly of a Bottle with wine, Cracked severall wayse. I opened the head and found the Dura Mater mortifyed as far as the fracture went but the remaineing part very well, the Braine sound and firme underneath and not the least discolored.

September, 1675.

27. A lusty, able seaman, having a tumor upon the Internall part of the Cubitt, fixed to all the tendons and vessells; this tumor as he came back from the East Indyes plying Norwards, and being very cold encreased to a large

magnitude. A Chyrurgeone in Holland attempted to bleede in the same Arm upon the tumor, and did bleede him butt the orifice never united and the tumor encreasing kept it open. The tumor when I saw itt first was fixed to the Cubitt. My Coz. proposed this to him; first he told him the danger of the tumor, and then he sayed that he would make ligature upon the upper part of the Arme and lay open by crude incisione the whole body of the tumor, and if then we could see any hopes of recovering his Arme, wee would save itt, if nott, he must be content *in instante* to loose itt. The fellow was very unwilling though then he had his full strength, and sayed he had rather loose his Life than his Arme, as the consequence proved too true. Itt was thus; he shews him to most persons about Towne and one putt in his probe in the orifice where had beene lett bloode and oute gusht a flux of bloode, which then was easily stopped, butt 3 or 4 nights afterwards he had a new flux from the orifice which threw him into a singultus and fainting. One being called to stop itt, did by ligature, but upon the loosening of the Rowler he had another flux which weakened him more and then he was willing to have his Arme taken off, but he was soe weake that my Couz. was unwilling untill he had more strength. Upon the last Rowling his arme tumified very much and att length mortifyed although wee had a cutaneouse separatione, yett the mortificatione runn up into the Axillar Vessels and killed him. Butt there was one thing observeable that when the mortificatione first seised, and he was pretty hearty, his singultus stopped and we had some hopes, butt in 3 or 4 days he relapsed and in conclusione dyed.

28. A Taylor having an Exostosis as big as a wallnutt upon the first Internode of the Index upon the flexor, indolent, butt troublesome in its motione, he was willing to have it off; which was done by making Circular Incisione round the Tumor and pincht off with a paire of pincers made answerable to the forme of the Tumor, which was done, withoute any flux and used his finger better by much than before.

29. Ould Alie her case;—she had a large excrescency, which threwe its selfe oute from the cavity of the Presepeoli

[*Processus Alveolaris?*] of the upper Mandible, and was Callouse. Itt encreased in continuance of time to that magnitude that it threw up her lip and flatted her nose and downwards soe that she could nott gett any thing into her mouth. The tumor was fixed to the gums and the Os Palati, how itt came att first she knew nott. As much of the Tumor as was externall was taken of by a red hott paire of forceps, defending the face with an Iron Vizard, for my Coz. was afraid of an hæmorrhage which would have beene difficult to stop. In the cavity of the gums we kept the excrescency downe with oure repeated actuall cautery. The Tumor when itt was taken off proved cartilaginouse. Itt rising upon her very fast, and the woman being unwilling to be burnt any more wee made ligature aboute the body of the Tumor as much as could be commanded, and in sometime itt came of and her face flatted, and her lips came together, and we had a large cavity above upon us through which came severall peeces of the mandible;—through this loss of substance a continuall defluxione of a hott saline Rheume distilled, which proved very troublesome for the salinall matter being gradually discharged through these parts by their Common Ducts. By such a loss of substance itt continually fell downe causeing a continuall coughing and the woman being above 80 yeares of age, fell into a consumption and att length dyed. If the tumor had remained it would have starved her.

30. A fatt corpulent woman aged about 40 yeares had a very large tumor in her Left Breast. Itt was as big as a pecke, skyrrhus, and upon the dependent part a fungouse. She was very willing to loose her Breast which was accordingly done by Ligature, butt there being too suddaine a regurgitatione of the matter upon the habitt she dyed suddenly. I opened her, butt first I tooke off the Breast above the ligature and found that betweene the ligature and the body all was faire and sound, butt from the ligature outwards began to mortify. In her Body was nothing observeable, butt all parts sound. She was very fatt, and the onely cause of her death as could be adjudged was as is recited before.

31. My Cozen James upon the searching of a little Boy att

the Hospitall in *May,'76,* for the stone, did feele the stone and gave the staff to me to feele and I felt itt, and upon his drawing oute the staff itt came free, untill itt came to the Balanum where itt stopped; and wondring what itt might be I pulled hard and there came oute a small stone in the cavity of the staff which was all the stone the child was troubled withall.

On the *26th of May 1676* was a greate Fire in the Burrough of Southwarke which very much endangered the burning downe of the Hospitall.[1]

June the 6th '76.

32. A fellow aged 25 yeares laboured under a large tumor all over his breast, it first proceeded from a Pleurisy and neglecting Bleeding and revulsione; he fell into a Peripneumonia, the conteined matter (in halfe a yeare's time) protruded itselfe through the Intercostall Muscles and Imposthumated externally, which being opened upon the dependent part we discharged 2 qts. the first day. His stomache held pretty well, he had an Asthmaticall Cough but did not expectorate the same matter which was discharged att the apertione but a viscouse frothy substance; in three dayse time he dyed. After death I opened him and found that the matter mortifyed the Intercostall Muscles and Pleura, the Ribs cariouse, the whole left side was replete with the same fœtid matter, the substance being totally wasted, the Mediastinum contracted and the hart drawn to the right side, the Lungs were like spongy flesh adhered to the Pleura, and the same matter as he expectorated conteined in them. All the lower viscera indifferent well.

33. A woman getting drunk with brandy fell asleepe over a candle, and sett her clothes one fire and before any one came to her assistance she had burnt her face, neck, breast, back, and both her armes very much, the eschars being soe thick that I could scarcely cut through them, at length the eschars separated, there was such a discharge of matter from the Burnes, that it weakened her and killed her.

[1] This notable fire is referred to in the Introduction to the 'Hospital Calendar.'

33*. A young woman takeing cold upon childbearing, fixt the matter upon her Lungs and choaked her, she complained of a difficulty in swallowing, and a soarness iu her throate, faint, sickly. After she was dead, I found the right Lobe of the Lungs replete with a matterish serum and an adhæsione to the Pleura, the left side was free, this was that which caused her difficulty in breathing, and the acidity of it the Aphtha. All the uterine parts were free from auy distemper.

34. *The Weaver aged 25.* When I saw him first he had a hard indolent tumor in the left testicle without any tumor in the Productione, wee ordered him a bag Truss to keep the part in a better position. This was his case in June 1676: but by the use of oure fomentationes and Plaisters, wee began to have a separatione of serum *in scroto,* and discharged itt to the quantity of a Pint and hoped that the Tumor would spend in an Hydrocele; the swelling was rather less than bigger and somewhat softer. Butt the late dreadfull fire in Southwarke happening, much endangering the Hospitall, those patients that were capable of working did worke, amongst whome this was one, for he could goe very well, and was nott sicke, nor any other way indisposed. Within a week after the fire, he haveing overstrained himselfe, a new defluxione of humors came downe, and in despite of all attempte made to the contrary the testicle encreased twice as big as before to a tumor in the Productione very hard. This tumour encreased so much that you might feele itt hard in the Belly as high as the regione of the Kidneys. Thus he lay above a quarter of an yeare, his Stomack very well, yett he consumed in body, and the tumor encreasing as well in the Abdomen, as in Scroto till att length it encreased so much in the cod, and the vessels soe largely distended, that he had severall eruptiones of blood. There was a Seton left in the depending part of the Scrotum, through which good large quantityse of water discharged sometimes blood. At length dyed, languished above a quarter of an yeare. *Post mortem,* I opened him; my first care was to lay the Tumor in situ as much as I could, butt upon the opening of the Abdomen, I found a very large Bladder of water in the Pelvis which att first I thought was the Vesica Urinaria but upon more seriouse inquisitione, I found itt to be a separatione of Lympha, that was lodged

above, and had an Appendix to the other tumor that adhered to the Preparing vessels, and likewise discharged its selfe in scroto (which gave us the seperatione I spoke of before. The Hydatidis was as big as an ox bladder (blowne up) full of clere Lymphid matter. I could find no more butt this. The Body of the Testicle was as big as the belly of a Bottle and distended which a crass Lymphid matter, which makes the tumor what wee called a sarcocele. The Preparing Vessels, labored under the repletione of the same tumor, and likewise the whole body of the Mesentery run into a glandulouse substance firmely adhering to the Lumball regione so fast, that I was forced to separate itt with my knife. The Preparing Vessels, and the Ureter, was drowned in the Body of this large unequall, præternaturall tumor, the Mesentery being one Glandulouse body. The Kidneyse were very good and firme, the Intestines small and shrunk up, the Bladder good, the Liver very well in its parenchyma. His lungs and heart very well, there was a præternaturall quantity of water in the ventricles of the Braine. J. M.

35. A woman aged 40 came into the Hospitall with a difficulty of breathing and her face and legs Hydropically tumifyed, being as supposed an Anasarcka; and very weake and ill. After some time she dyed. I opened her, and found the lower Belly with a naturall quantity of water, the viscera very well, onely the Hepar Skyrrouse. In the Thorax there was a large quantity of water, and likewise in the Pericardium, the Lungs were very flabby, though nott much discolored. In the Left Ventricle of the Hart I found the same Crass Lymphoid substance, adhering to the Collumella, and protruded its selfe into the Magna Arteria.

36. The woman aged 16, in St. Tho. Hosp. laboured under a difficulty of breathing, a very greate paine att her heart. After death I opened her in *December 1676, Die 26.* Her breast was narrow. After I had taken up the Sternon, I found a totall adhæsion of the Lungs to the Pleura, nott much discolored, nor noe matter lodged in them (she never complained of a cough). Her Hart large, a præternaturall quantity of water in the Pericardium. Wee weighed her hart which weighed oz. 12; the Liver somewhat skyrrhus, the vesica fellea large with a Cœrulean Choler. Her blad-

der largely distended with water. Her Matrix very small, tending to the left side. I tooke all the appertaineing with the Vulva, and shewed them. The Hymen was plainely permeable, as allso the Caruncule Myrtiformes. The rest of the viscera very well. I opened her heart, and found a Polypus, which adhered to the Columella in the right Ventricle, into the Vena Arteriosa.

December 1676.

37. A lad abont 17 years of age laboured under a Rheumatisme which terminated in his thigh and legg, in an Abscess, upon the discharge of which, there was so large a dischargo of matter that his body consumed and the parts mortifyed, and in a fortnight dyed. A woman laboring under a feaver in the same case.

38. One aged abonte 30, received a Contusione on tho neck; it imposthumated largely and att length broke of its selfe. He came into the Hospitall much emaciated, loss of stomack, and a large discharge of a salivall matter from tho salivary Ducts, tho acrimony of the matter, upon a fermentation of his blood, corroded and mortifyed both externally and internally soo that he could swallow nothing, and att length Death.

39. A country man of a strong saline constitutione, came into the Hospitall with a compound fracture (a Cart loaded went over the small of his Legg) both the fossills shivered and broke. I putt him in a good positione, wee had Imposthumationes, and exfoliatione of the Bones, yett in sixteene weekes time I cured him, that leg being somewhat shorter than the other.

December 1676.

40. One being of a strong constitutione received (by accident) a puncture on the flexor Pollicis, the paine was soe violent that itt bronght downe a greate defluxione of humors and att length the violency of paine terminated in an Imposthumatione, the which I laid open in the depending part, upon which discharge he was immediately relieved, and in 3 weeko or a month's time, his paine was all off, and tho Incisiones cicatrized, there remaineing a contraction of the

tendons and a hardness upon the member which by emollient supleing Medicines, in some continuance of time were brought to there former use.

41. One aged about 25 by a defluxione of humors upon the head of the Os femoris it was protruded; this continued so for many years, att length the reducing of it was attempted by a bone-setter, who upon extensione brought downe a new Defluxione, this an Imposthumatione, and att length a Mortificatione, that the vessells were corroded, that he bled att the perforatione 2 or 3 qts. of an Ichorouse bloody matter in a day, for 3 or 4 Dayse and Dyed. After he was Dead I opened the Member. A Mortificatione had seized all the Member, the head of the Os femoris, and the Rotators were partly consumed and was thrust up above the spine of the Ischion, the Acetabulum was caries, the Ligamentum latum, and breve was utterly oblitterated, and the mortificatione was inserted into the ramificatione of the Iliack vessells and full of the same matter that was discharged when he was living. This person had bin better to have continued lame, than to be brought to an untimely end by a bold ignorant Undertaker.

42. A lad aged 15 Laboured under a Rheumatisme, which terminated in an Imposthumatione in his Knee. This was discharged when itt came to maturity by a Brother Surgeon butt the boy's friends provcing poore they gott him into Hospitall. I Dilated the Imposthumatione yett the Boy laboured under an Intermitting feaver; there was a plentifull discharge of matter, yett att length the Boy fell into the Small Pox and Dyed deliriouse. Although we kept the depending orifices open, yett his Intermitting threw downe more matter constantly upon us.

February the 12th 1676-7

43. One Aged abonte 50, laboured under great difficulty of Breathing, a constant Cough, large expectoratione, he could nott ly on his right side. Dyed. I opened him, his lower was all perfect, onely the Liver, which was schirrhus. Upon takeing up the Sternon the side of the thorax was full of water, the Lobes of the Lungs looked of a Pale colour, the Lungs were very flabby, and noe adhæsione.

On the left side there was an Adhæsion of the Lungs to the Pleura, Glandulouse and full of a Visconse frothy matter. In the Hart we found in the left Ventricle a Polypus intruded into the Aorta, and adhering to the Columella. He had a greate Color and fresh in his face which was from oppressione below and stagnation above.

44. A Person *In March 1676-7:* laboured under a very Ill habit of Body, haveing formerly had a fistula Lachrimalis, upon the stopping up of which the matter fell upon the ethmoid, and fouled the bone. Mr. Peirce to prevent a further Inconveniencey putt him into a salivatione, butt upon stirring of the matter, itt run all Downeward, and terminated in a Dysentery and he Dyed. After death I opened him; first I divided the Craninm, the Braine was very turgid, and replete with water, and likewise a goode quantity of water in the severall ventricles, the Salivary Ducts were nott much distended (because nothing ascended up to them) the Lungs one the right side were Indifferent well, but on the left he was Asthmaticall, and an Adhæsione to the Pleura. The Pericardium largely Distended and adhered to the Pleura (which is more than ever I see before) and a greate quantity of water conteined in itt. The Hart was Lax and flabby, little or noe blood being in either ventricle. The Coronary Vessells were largely distended, and the Viscosity I have soe often found conteined in the left Auricle. The Liver Skirrhus, the vesicula biliaris very largely distended, and had tinged the adjacent parts with its color, the Mesentery replete with glandules, the Spleen indurated, etc. I am really of the opinion, that from the large quantity of choler, upon stirring up the matter by salivation, was that which threwe him into the Dysentery which carried him of; for Choler is Cathartical.

March 1677.

45. One labouring under an *Ulcus Tibiæ,* Highly Scorbitticall. A large Schirrhus tumor upon the spleene, Ictericall, and as many complicated distempers as could possibly be contained in one person. When we attempted to heal up the ulcer, then he fell into a Dysentery, and when his sore run he was weakened. Att this rate he continued a yeare

and more, att length Dyed. I opened him, and found all the Viscera contaminated, but more especially the Mesentery Glandulouse, the Liver somewhatt large, the Vesicula fellea very largely distended, but the Spleene bigger than the Liver, weighed 6 lb. indurated and a fæculent Melancholy contained in itt.

46. I opened a Scotch man that dyed in the Hospitall. Hydropicall; when I had opened the Abdomen, all the Viscera were mortifyed and discoloured.

47. A Seaman came into the Hospitall, with a large wound upon the Bregma, withoute any Symptomes. The wound was digested, Incarnated, and healed, after some times he fell into vomitings, Convulsiones and paralisis. He complained of noe greate paine in his head, and att length grew deliriouse and soe dyed. I opened his head and in the right ventricle of the Braine found a large Quantity of water, which I suppose was the Cause of relaxing all the Nerves. I found noe blood extravasated nor fracture nor fissure upon the cranium.

49. A woman Aged 50, laboured under a spitting of Blood, which for some continuance of time left her. Att length she relapsed into a violent vomitione which carried her of in twelve houres time. After she was dead, I opened her, and in her stomach was a pottle of crudo and grumouse Blood. I imagine the eruptione was made from the Vasa brevia into the stomach. The Lungs and Hart good, the Liver, Spleene, Pancreas very much indurated, the Mesentery very thick and glandulouse.

Of the Fistula in the Fundament and the Cure thereof.

The patient came up to London for help upon the third day of Feb. and made choice of my Master, and with God's help of the sixth of the said month in the morning about six or seven of the clock, he repaired to his Chamber, the patient being up, and sat by a good fire. He first gave him

a draught of small Beere. When all the things was ready the operatione was done presently. First my Mr. desired the patient to loose his Breeches and bowe himselfe upon his bed holding his thighs asunder, then my Mr. did oyle his middle finger thrusting it up at the fundament till he came to the upper part of the fistula. Then with the other hand he tooke a needle made of Lead threaded with foure or five fold of stitching silk made into a Ligatour well waxed. Then my Mr. took the needle and [passed it into the fistula,] setting it upon the end of his finger which is within the fundament, and conveying it out at the fundament. Then he did knitt the ligatour as straite as he could pull it, of a double whizle knot, cutting both the ends away, and then drest him twice a day with Basilicon until the ligatoure did drop from him which was nine dayes. Then did he dress him with Egiptiacum[1] mixt with Basilicon to heall him and dry him up. But in the meantime as he was proceeding on, and had brought the cure in a forward way, a new business befell him, piles came downe and did lie upon the sore that it could not heall. For that he let him blood in the arme and applyed Leaches to them and applyed drying powders with a chafing dish and a little fire, throwing powder upon the fire and he sitting over it to dry up the piles, so that it continued a month longer in care than it would have done if them piles had not happened, and upon the 24th of March he returned back to his home a perfect sound man.

Note.

It is worth notice that this operation is done almost exactly according to the directions of John Arderne, the old

[1] *Unguentum Ægyptiacum* (of the 'London Pharmacopœia,' 1662) was thus made:—℞ Æruginis minutissimæ tritæ partes v; Mellis partes xiv; Accti acerrimi partes vij. Coquantur omnia simul in justam spissitudinem, et in colorem subrubeum. (The cupric salt being reduced by the honey, it would have contained suboxide of copper, and thus be of a reddish colour.) The name of Basilicon ointment has lasted to our day. In the Pharmacopœia of 1662 there were two Basilicons, the greater and the less (or cheaper). The latter was thus composed:—℞ Ceræ flavæ, Resinæ pingnis, Picis Græcæ, ana lib. dimid. Olei uncias novem. Liquata commisceantur, et fiat s. a. unguentum. It was thus almost the same as our modern resin ointment. The greater Basilicon contained in addition Turpentine, Olibanum, and Myrrh.

English surgeon, who wrote a 'Treatise on the Fistula' about 1370; and that a "translation of John Arderne" is one of the subjects mentioned in James Molins's note-book, though the text does not appear.

This is Arderne's account of the operation, as afterwards printed in English in 1588.

"Take the instrument called *Acus rostratum* and put that ende which hath the eye into the hole of the Fistula next the fundament, your finger of the left hand being in the fundament, and when you feele the needle against your finger, labour diligently to bring out the end of it at the fundament by bending it gently. Which done, put into the eye of the needle a strong silk thrid, four or six fold, which we call *Frenum Cæsaris*, and draw it through the fundament into the hole of the Fistula with another spare single thrid, that if the *Frenum Cæsaris* happen to be cut, or breake, then with the same spare thrid ye may draw in another with great ease. Which being done, you may choose whether you will cut it or fret it out."

The *Acus rostrata* is described as "a snowted needle, for it hath the one end like a snout, and in the other end an eye like a needle, by which the thrids ought to be drawne through againe by the middle of the Fistula. And it ought to be of Silver, and it should containe in length eight inches."

Arderne says further:

"If it happen that the Fistula be deepe, and that there be distance betweene the hole of the Fistula and the fundament, or if the patient be fearefull to abide cutting, or for some notable cause being there, then mayest thou with a thrid drawen through the middest of the hole of the Fistula, and the fundament, cut the flesh. And it availeth as well as by cutting with a knife, but that it asketh longer time. For though ye binde it right straightly in the beginning, yet it will be a moneth or three weekes at the least, or the fretting be complete."

Thus it appears that the surgery of fistula had not changed much in 300 years, except in the time required to complete the operation.

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